

Green cleaners

Simple cleaning
recipes for a
safer home



Many of the products we buy to care for our homes include ingredients that can be harmful to people and the environment. What can you do? You can choose less-toxic products to clean your home. Doing that can protect your family and the environment. You'll also save money by using some simple safe ingredients to make your own cleaners. This publication contains recipes and tips to help you create a safer home.

Ingredients

Baking soda (sodium bicarbonate): Absorbs odors and is a mild abrasive. Found in the baking section of the grocery store.

Glycerin: Found in pharmacies or health food stores, this water-loving liquid has antiseptic qualities and moisturizes the skin.

Hydrogen peroxide: Disinfectant. Use the household concentration (3 percent) typically found in pharmacies.

Liquid soap: Vegetable oil-based soap sometimes referred to as castile soap. Found in most health food stores. Dr. Bronner's is a popular one.

Liquid detergent: Most dishwashing liquids are detergents. Try purchasing vegetable oil-based soaps, which can be more environmentally friendly than petroleum-based products. Vegetable oil-based soaps can be found in health food and many grocery stores. Petroleum is a limited resource (unlike vegetable oils) and its extraction and refining causes pollution.

Metro

People places. Open spaces

Clean air and clean water do not stop at city limits or county lines. Neither does the need for jobs, a thriving economy and good transportation choices for people and businesses in our region. Voters have asked Metro to help with the challenges that cross those lines and affect the 25 cities and three counties in the Portland metropolitan areas.

A regional approach simply makes sense when it comes to protecting open space, caring for parks, planning for the best use of land, managing garbage disposal and increasing recycling. Metro oversees world-class facilities such as the Oregon Zoo, which contributes to conservation and education, and the Oregon Convention Center, which benefits the region's economy.

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Notes

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Vinegar: Removes soap scum, grease and mineral deposits and acts as a deodorizer. Use only white distilled vinegar for most of these recipes. You can try apple cider vinegar for windows, since it has a more pleasant scent.

Washing soda (sodium carbonate): It is slightly caustic and a great grease cutter. Don't use it on waxed floors (unless you want to remove the wax), fiberglass or aluminum. Found in the laundry section, made by Arm & Hammer.

Essential oils: Mostly used for deodorizing or scenting cleaners. Essential oils, such as mint, eucalyptus, lavender, lemon and tea tree, can be found in health food stores or herbal supply shops. Tea tree oil is currently in the process of being registered as a disinfectant in this country.

Non-toxic in small quantities, this oil may be toxic in concentrated forms. Keep out of the reach of children.

Tip: Be sure to put all mixtures in clearly marked containers.



All-purpose cleaners

Mix ingredients for each recipe in a spray bottle. Use for cleaning countertops, floors, walls, carpet and upholstery.

1. Combine 1/4 cup white distilled vinegar, 1/2 teaspoon liquid soap and 3/4 cup warm water, shake to blend. For really big jobs, combine 1/4 cup liquid soap, 1/2 cup white distilled vinegar and 2 gallons of warm water in a pail and stir to blend.
2. Dissolve 4 tablespoons baking soda in one quart of warm water.
3. Use a mixture of 1/2 cup vinegar and 1 cup to 1 quart of warm water.

For an abrasive cleaner Use baking soda or a non-chlorinated scouring powder such as Bon Ami.

Grease cleaner

- Mix vinegar and salt together for a good surface cleaner. Will remove grease if vinegar is at full strength.

Disinfectants

- For kitchen cutting boards and bathroom fixtures, use a white distilled vinegar spray followed by a 3 percent peroxide spray. Wipe clean.
- Rubbing alcohol also is a disinfectant. It is extremely flammable; use in a well-ventilated area far from possible sources of ignition. Wear nitrile gloves. Apply with a sponge and allow to dry.

Glass cleaner

Combine 1 quart warm water with 1/4 cup white vinegar or 2 tablespoons lemon juice (use both vinegar and lemon if you want the cleaning abilities of vinegar with the scent of lemons).

Mix ingredients and store in a spray bottle. Use as you would any glass cleaner (add a drop or two of essential oil for a pleasant scent).

Tip: Invest in a squeegee. It is a great tool for cleaning windows. A razor blade also is a good tool for scraping off dirt or paint before cleaning.

Learn more

To order any of the following publications, or for disposal, recycling or household hazardous waste information, call Metro Recycling Information at 503-234-3000 between 8:30 a.m. and 5 p.m. Monday-Saturday.

Hazardless home handbook: a guide to hazardous household products and effective alternatives, a comprehensive alphabetical listing of common types of products, less toxic substitutes and proper storage and disposal information. Also available in PDF format from Metro's web site at www.oregonmetro.gov/greencleaners.

Safer cleaning products, an "Alternatives" fact sheet about health and environmental hazards of some cleaning products, ingredients to avoid and alternative product information. Visit the Washington Toxics Coalition web site to view this publication at www.watoxics.org.

What's hazardous in your home? Identifies hazardous products in your home and directions for proper disposal. Also available on Metro's web site at www.oregonmetro.gov/hhw.

Simple steps to a healthy lawn and garden provides six simple things you can do to grow a beautiful garden naturally, without using chemicals. See lawn tips on Metro's website at www.oregonmetro.gov/garden.

Natural gardening: a guide to alternatives to pesticides is a trouble-shooting guide that lists specific garden pests and diseases and how to manage them without using chemicals. View highlights from this publication on Metro's web site at www.oregonmetro.gov/garden.

Web sites with related information

Washington Toxics Coalition: www.watoxics.org
Information and fact sheets about alternatives to toxic products.

EPA fact sheet: Source Reduction Alternatives Around the Home. www.epa.gov/epaoswer/non-hw/reduce/catbook/alt.htm

Health and safety information on household products: Learn more about what's in these products, about potential health effects, and about safety and handling: <http://hpd.nlm.nih.gov>.

Metro Recycling Information

For recycling options beyond the curb, garbage and household hazardous waste disposal information, natural gardening, composting or waste prevention, call Metro Recycling Information at 503-234-3000, between 8:30 a.m. and 5 p.m. Monday-Saturday or visit www.oregonmetro.gov/recycling.

This publication was produced using information from a variety of sources, the following were especially helpful: Metro's Greener Cleaner Pocketbook, Salmon Friendly Recipes published by the Oregon Plan for Salmon and Watersheds, and Non-toxic Household Cleaners from the Chittenden County (Vt.) Solid Waste District.



How to purchase less-toxic products

You also can purchase ready-made cleaning products that are less hazardous than many traditional household cleaners. Look in the health or natural food sections of your grocery store, or visit a store that specializes in these types of products. Some brand names that feature “earth-friendly” product lines include:

- Bi-O-Kleen
- Citra-Solv
- Earth Friendly Products
- ECOS
- Planet
- Seventh Generation
- SoapWorks

Some less-toxic products can also be found in the regular cleaners aisle: FantastiK Herbal Mist All Purpose Cleaner, Bon Ami cleanser, Murphy's Oil Wood Soap and Pure Citrus natural citrus cleaner.

Warning words on product labels

If the product has this signal word on its label	It falls into this category	And it takes approximately this much to kill an average person
Danger or poison	I Highly toxic	A few drops to 1 teaspoon
Warning	II Moderately toxic	One teaspoon to 1 ounce
Caution	III Slightly toxic	More than 1 ounce
No signal word	IV Not toxic	

How can you tell if a commercial product is relatively non-hazardous? Read the label:

1. Check for warning words like “danger” and “warning.” Try to select products with no warning words or the word “caution” – this means the product is less toxic or non-toxic.



2. Are all of the ingredients listed? Be aware if the product only lists “active” ingredients; if other ingredients are not listed, you have no way of knowing their potential effects.
3. Know your ingredients. Many of the products listed above have easy to understand ingredients: soap (vegetable-based surfactants), orange oils (also known as d-limonene), vinegar, water, alcohol, lauryl sulfate (usually coconut derived) and sodium citrate (related to citric acid in lemons).
4. Detergents are synthesized chemicals that are petroleum-based and work the same way that soap does, only they are not as earth-friendly.
5. Avoid chlorinated compounds, petroleum distillates, phenols and formaldehyde. Words such as ethylene/ethyl, butyl/alkyl, benzene, phenols and formaldehyde indicate a product with ingredients that are potentially harmful to health or the environment.

What to do with old products

Use up toxic cleaning products. In the Portland, Ore., metropolitan area, you can properly dispose of toxic products through Metro's household hazardous waste program. Call Metro Recycling Information at 503-234-3000 for locations and hours of Metro's two permanent collection facilities or to find out if there is a community collection event scheduled soon in your neighborhood.

Crayon mark remover

To remove crayon marks from walls, floors, counters, cabinets and furniture, rub area with toothpaste and a damp cloth. Do not use on non-vinyl wallpaper.

Room/air freshener

After you locate the source of the odor problem and take corrective action, try opening a window and circulating air with a fan or air conditioner. If odors persist, try one of these ideas:

- Simmer cinnamon and cloves in water.
- Pour vanilla extract on a cotton ball and place in a small dish. Use in your car, home or refrigerator.
- Place cut lemons or baking soda in a dish.
- Set out a dish of vinegar or boil 1 tablespoon white vinegar in 1 cup of water to eliminate unpleasant cooking odors.

Hand cleaners

To remove heavy grime combine 4 ounces of beach sand, 1 ounce of pumice powder and enough glycerin to moisten the mixture in a labeled screw top jar. Use about 1 tablespoon at a time, rubbing into the hands thoroughly.

Hand wash disinfectants

- The Environmental Protection Agency recognizes soap as a legitimate disinfectant. There are many vegetable-oil-based soaps available at supermarkets and health food stores.
- Tea tree oil is antibacterial and antifungal. Add 10 drops of tea tree oil to 4 ounces of liquid castile soap. Shake to stir or blend in a pump container.



Laundry soap

Commercially formulated laundry detergents that are more environmentally friendly are available. Seventh Generation, Ecover, Life Tree and Earth Friendly Cleaner provide concentrated, vegetable-oil-based (not petroleum) laundry soaps without synthetic fragrances. Add 1/2 cup washing soda to the wash cycle as a booster for cleaning heavily soiled clothes.

Fabric softener and deodorizer

Add 1 to 2 cups of vinegar to rinse cycle to deodorize and soften fabrics.

Fabric deodorizer and whitener

Add 1/2 cup of baking soda to rinse cycle to deodorize and brighten clothes.

Stain removers

- Mix 1 part liquid vegetable oil-based soap, 1 part glycerin and 8 parts water. Pour into a squirt bottle; shake well before using. Apply to stain as soon as possible. Wash and rinse in cool water only. Do not use hot or warm water on sugary stains.
- Mix equal parts vinegar and water. Use to remove tough stains including grass, perspiration, rust, jam, coffee, orange juice, wine, beer, ketchup, barbecue sauce, chili, urine and pet stains.
- Use 3 percent hydrogen peroxide solution to spot clean. Let dry. Repeat if necessary.

Bleach

Look for a commercial non-chlorine bleach or try using:

- 1/2 cup 3 percent hydrogen peroxide in the rinse cycle
- 1/2 cup washing soda to warm or hot water wash cycles
- 1/2 cup lemon juice in the rinse cycle
- 1/2 cup baking soda to warm or hot water wash cycles

Tip: After clothes have spun dry in the washer, hang them to dry in the sun. Sunshine is a natural bleach.

Stains should be removed as soon as possible. If soil remains on wallpaper too long, permanent discoloration may result. To avoid discoloration, don't rub spots.

Ordinary dirt spots can be removed with a mild soap (e.g., castile soap) and warm water. Rinse thoroughly with clean water. Blot wallpaper dry with a soft lint-free towel. For more difficult stains that are only surface deep, use a stronger detergent (e.g., liquid vegetable-oil based laundry detergent). Test on an inconspicuous spot first, and always rinse after applying a detergent.

Painted Walls

If walls are very dirty, use a stronger alkali solution: dissolve 2 tablespoons baking soda and 2 tablespoons laundry detergent powder in 1 gallon warm (not hot) water. Stronger solutions remove some of the paint. Always rinse off.

Gloss or semi-gloss enamels are less likely to be damaged by cleaning than flat latex paint. Test cleaning solution in an inconspicuous area first. If wall color and finish look the same only cleaner, go ahead and use.

Washing Procedure

1. Before washing, dust or vacuum walls to remove loose soil.
2. Use one bucket for washing solution and one for rinsing, and a large cellulose sponge for each bucket.
3. Wear rubber gloves to protect hands.
4. Start washing at the bottom and work up, so cleaning solution does not run down the dirty wall and cause streaks that are hard to remove.
5. Rub gently to avoid damage to paint.
6. Wash and rinse one area; then do the next overlapping area.
7. After cleaning several sections, dry off excess moisture with a soft absorbent cloth or towel.



Furniture polish

- Mix 1 teaspoon olive oil and 1/2 cup lemon juice. Apply with a soft cloth, rubbing into the grain. Buff with a clean corner of the rag.
- Mix 1/4 cup white distilled vinegar and a few drops of food-grade linseed oil, jojoba or olive oil. Test on wood first, and then polish.

Wood furniture polish

Mix 3/4 cup olive or other vegetable oil, 1/4 teaspoon vinegar and 1/2 teaspoon lemon oil (optional) in a squirt bottle. Squirt on furniture or rag and rub into wood. Shake well before each application.

Wood cleaning formula

- Combine 1/4 cup white distilled vinegar, 1/4 cup water, 1/2 teaspoon liquid vegetable oil-based soap, a few drops of jojoba or olive oil, 3-5 drops essential oil (optional) in a bowl. Saturate a sponge with the mixture, squeeze out the excess, and test wood surface. Rinse sponge in warm water in between washes.
- To remove water spots on wood, allow the spots to dry out completely. Apply real mayonnaise over stain and let stand for at least an hour. Clean and buff with a clean rag.

Leather cleaner

Mix 1/2 cup olive oil and 1/4 cup vinegar in a squirt bottle and shake before each application. Rub with soft cloth into leather for cleaning and conditioning. Do not use on suede.

Other household tips

Pressure washing (driveways, patios, sidewalks, decks)

- Try using water only. Water pressure alone often removes dirt and grime.
- A stiff broom is often all you need to clean hard surfaces and doesn't waste water. Sand and a push broom can be used to remove unwanted algae.

Charcoal lighter

Use a metal cylinder charcoal chimney starter or electric charcoal lighter instead of starter fluid.

Glue

- Use Elmer's-type white glue or yellow carpenter's glue for wood, china, paper and other porous materials.
- Use a glue stick or paste rather than rubber cement.

Paint

Use latex water-based paints and apply with a brush or roller whenever possible.

Paint stripper

- Use a scraper, rasp or abrasive block, heat gun or sandpaper to remove paint without chemicals.
- Use water or alkali-based paint strippers rather than solvent-based products.

Many older homes still have lead-based paint on woodwork. **Lead** dust from scraping and lead fumes from using a heat gun are dangerous to human health. **They are especially dangerous to children.** Before you begin, find out if your home's paint contains lead by contacting the Multnomah County Lead Line at 503-988-4000, or the State of Oregon Lead Poisoning Prevention Program at 971-673-0440.

Metal rust removal

Wet a sheet of aluminum foil with water. Rub just the rust with the wet foil. Be careful, as the foil will scratch chrome.

Dry out damp areas

To prevent development of mold in damp areas, use kitty litter for its moisture absorbent properties. Place bowls of it in damp areas. Replace with fresh litter every week or so. (And keep the kitties away!)

Wall and wallpaper cleaner

For wallpaper, refer to the manufacturer's guidelines first.

Diaper pail deodorizer

Mix 1 cup baking soda with 1 teaspoon tea tree or other essential oil. Work out all lumps with a fork. Sprinkle in bottom of pail after liner is removed. Periodically rinse pail with vinegar and dry in the sun.

Moth repellants

- Store clean woolens in sealed plastic bags or airtight containers.
- Place garments in the freezer for several days to kill adult moths and larvae.
- Vacuum rugs, carpets and upholstered furniture regularly.
- Combine 2 ounces each dried rosemary and mint, 1 ounce each dried thyme and ginseng, and 8 ounces of whole cloves. Blend well and make into moth-repellant sachets.
- Dry-cleaning is a significant source of pollution. Woolens can be hand-washed using a mild soap and cold water. Lie flat to dry.

Laundry starch

Combine 2 to 3 teaspoons cornstarch with 1 cup water in a spray bottle. Shake well. Use as you would commercial spray starches.



Toilet bowl cleaners

- Combine 1/4 cup white distilled vinegar and 2 cups water in a labeled spray bottle. Spray along the inside rim of the toilet. Leave on for 15 minutes before you scrub with a toilet brush.
- Pour a cup of white vinegar into the toilet and toss in a handful of baking soda to soak about 10 minutes. Swish with toilet brush.
- Combine 2 teaspoons tea tree oil with 2 cups water in a labeled spray bottle. Shake and spray along the inside rim of the toilet. Let stand for 30 minutes before scrubbing.
- Scrub regularly with a toilet brush and non-chlorinated scouring powder like Bon Ami.

Tip: Clean bowl thoroughly and often. Drain water from toilet bowl for better cleaning. For serious stains or rust, empty water out of bowl and scour with a wet pumice stone. When wet, the stone will not scratch porcelain.



Oven cleaners

- Mix equal parts salt and baking soda in a bowl and add water to make a paste. Apply paste to walls of oven. Let stand five minutes, then wipe clean with a damp cloth. Use a brush on heavy spills. Do not allow baking soda to touch heating elements or wiring.
- For heavier cleaning, sprinkle the bottom of the oven with baking soda to cover soiled area. Spray with water until very damp and keep moist by spraying every few hours. Let it set overnight. In the morning, scoop out the baking soda – all the grime will be loosened; rinse the oven well. Washing soda can be substituted for 1/2 the baking soda for really tough jobs, but requires more rinsing and is more caustic (wear gloves).
- Or use a non-chlorinated scouring powder such as Bon Ami, a pumice stick or a copper or steel wool scrubbing pad. Keep oven enamel wet if using a pumice stick. Scrubbing pads may scratch enamel, test first on a small area. A blunt knife is useful for prying up large crusty materials.

Tip: Prevention is the key to a clean oven. Line your oven with foil or an aluminum oven liner found in the baking section of grocery stores.

Metal polishes and cleaners

Use natural acids such as vinegar and lemon juice to clean aluminum, bronze, brass and copper.

Remove the lacquer cover on new brass, bronze and copper by submerging in boiling water with a few teaspoons each baking soda and washing soda (wear gloves). Never use baking soda on aluminum, as it will pit the surface.

Silver polish

Mix 1 teaspoon olive oil and 1/2 cup lemon juice; apply with a soft cloth, rubbing into the grain. Buff with a clean corner of the rag.

Silver cleaner

- Dissolve 1 tablespoon salt and 1 tablespoon vinegar in 1 cup hot water. Submerge a 3-inch square section of aluminum foil and the silver to be cleaned in the solution. The salt and vinegar react with the aluminum to eliminate tarnish. Wait 1 hour. Rinse silver and wipe dry with a soft cloth.
- Rub tarnished spots with a non-gel toothpaste and a soft cloth and rinse.

Brass and copper cleaner

- Mix 2/3 cup vinegar and 2/3 cup flour in a glass bowl. Add 1/2 cup salt and stir. Spread on tarnished metal. Wait 1 to 2 hours. Rinse, dry and polish with a soft cloth and a dab of olive oil.
- Combine 3 teaspoons of salt, 1 tablespoon of flour and enough white distilled vinegar to make a paste. Scoop the paste onto a clean sponge and polish bronze, brass or copper clean. Rinse with hot water and buff dry with a soft cloth.
- Soak bronze, brass or copper overnight in a solution of half white distilled vinegar, and half water. Rinse in hot water and wipe dry with a soft cloth.

Chrome cleaner

- Mix 1/4 cup baking soda with 1 to 2 tablespoons water to make a paste. Rinse well with warm water and polish with a soft cloth.
- Apple cider vinegar also can be used to clean chrome. Polish chrome using club soda.

All-purpose cleaner

2 tablespoons vinegar
1 teaspoon washing soda
2 cups hot water
1/4 cup liquid soap

Mix everything but soap in a spray bottle and shake. Add soap last. Mix gently. Apply and wipe clean. Good for countertops, woodwork, appliances, etc.

Dish soap

Use non-phosphate soap. Phosphates act as fertilizer – when they go down the drain, they are discharged into waterways and can cause a rapid growth of algae, which pollutes water. Tip: Use half the amount suggested for your automatic dishwasher.

Scouring powder

- Pour baking soda into a shaker and sprinkle in sink or on pans. Scrub with a rough pad and rinse.
- To make a heavy-duty scouring powder, combine 1/2 cup each baking soda and washing soda. This formula may scratch fiberglass. Use gloves; washing soda is caustic.

Scouring paste

Mix 2/3 cup baking soda, 1/2 cup liquid soap and enough water to make a paste. Add 2 tablespoons vinegar and stir. Keep paste in a tub at the kitchen sink for scouring pots and pans or the kitchen sink itself.

Tip: Use a wet pumice stone to remove tough stains from porcelain or enamel without scratching.

Stain remover

Liberally sprinkle surface with salt and squeeze lemon or lime juice over the area. Let sit and rub out. This can even remove rust if allowed to sit a few hours.

Drain cleaner

For best results, use these drain cleaners regularly to prevent clogs.

- Pour 1/2 cup baking soda down the drain, followed by 1/2 cup vinegar. To create pressure, immediately cover the drain and let it sit for 15 minutes. Follow with a kettle of boiling water (about 2 quarts). Use this treatment regularly to prevent clogged drains and keep them smelling fresh.
- There are a number of products that use compressed air instead of chemicals to open clogs. Here a few currently available at grocery or hardware stores: CLR Power Plumber, Liquid Plumr Power Jet, Klear Drain Instant Opener.
- For stubborn clogs, use a mechanical snake.



Kitchen sink disposal freshener

To freshen the disposal in your kitchen sink, drop in a few wedges of lemon and flip the switch. Instant good smell.

Cutting board deodorizer

Rub cut lemon onto the washed cutting board to eliminate lingering odors.

Garbage pail deodorizer

Mix 1 cup baking soda with 1 teaspoon tea tree oil. Work out all lumps with a fork. Sprinkle in bottom of pail after liner is removed. Periodically rinse pail with vinegar and dry in the sun.

Rust remover

Rust stains can be removed from porcelain by scouring with cream of tartar.

Tub and tile cleaner

1 2/3 cups baking soda
1/2 cup liquid soap
2 tablespoons vinegar
1/2 cup water
a few drops essential oil (optional)

Mix soda and soap. Add water, then add vinegar. Store in a squirt-top bottle and shake before using. Rinse thoroughly to avoid leaving a residue.

- Scrub surfaces with paste of baking soda and water. This also can be used to clean fiberglass.
- Scrub tile grout with a small brush and hydrogen peroxide spray. Add soft scrub (see below) for heavy mildew grout areas.

Soft scrub

Combine 1/2 cup baking soda with enough vegetable oil-based liquid soap to make a frosting-like mixture. Add 15 drops of tea tree oil (optional). Scoop the mixture onto a sponge and scrub the bathtub, sinks, Formica countertops or shower stall. Rinse.

Disinfectants

See "general cleaners" section.

Mold and mildew

Use equal parts vinegar and water. Spray and wipe clean.

Plastic shower curtains

Add 2 cups vinegar to laundry soap in washing machine. Add a few towels with the shower curtain. Air dry.

Antiseptic soap spray

Mix 3 tablespoons liquid soap, 20-30 drops of tea tree oil and 2 cups water in a spray bottle. Apply as needed. Tip: three-percent hydrogen peroxide by itself also can be used as a mild antiseptic.

Bathroom deodorizer

Mix 10-20 drops of essential oil into a 1 pound box of baking soda. Place open box under sink or near toilet. Add more essential oil as needed. Replace baking soda every three months.

General carpet cleaning

Use a soap-based, non-aerosol rug shampoo. Vacuum when dry.

Carpet odor remover

To neutralize carpet odors, sprinkle baking soda over the entire carpet. Leave on for one hour or overnight. Vacuum up baking soda.

Urine remover

Mix equal parts distilled vinegar and water. Spray or sponge onto the stain. Let stand for 10 minutes or so before blotting the mixture with a sponge or paper towel. This also can be used to remove pet urine odors from other surfaces.

Tip: *Never use warm or hot water on stains containing sugar.*

Carpet and upholstery stain removers

- See recipe in "laundry" section for stain remover.
- Blot stain with club soda or cornstarch. Scrub with a dab of dish soap.
- Mix equal parts vinegar and water. Use to remove tough stains including grass, perspiration, rust, jam, coffee, orange juice, wine, beer, ketchup, barbecue sauce, chili, urine and pet stains.

Tip: *You can get rid of odor and urine stains with enzymatic cleaners available at many grocery and natural food stores.*

All-purpose floor cleaner

Mix 2 tablespoons liquid soap in 1 gallon hot water. Mix, mop and wipe clean. Use less soap if streaking occurs. Wipe dry with a cloth.

Linoleum floor cleaner

Damp mop using 1/4 cup vegetable oil-based liquid soap in 2 gallons warm water.

Vinyl floor cleaner

Damp mop using 1 cup vinegar in 2 gallons warm water.

No-wax floor cleaner

Add 1/2 cup vinegar to 2 tablespoons liquid soap in 1 gallon of hot water. Mix, mop and wipe clean.

Tile floor cleaner

Mix 1 cup vinegar with 1 gallon hot water. Mix, mop and wipe clean.

Wood floor cleaner

- For unvarnished floors, damp mop with mild vegetable oil soap. Or try 1/4 cup liquid vegetable oil-based soap, 1/2 teaspoon glycerin, 1/4 cup white distilled vinegar and 2 gallons warm water.
- For varnished floors, or no-wax floors such as polyurethane or Swedish finishes, damp mop using 1 part vinegar to 10 parts water.

Heel mark remover

Make a paste of 1/2 cup baking soda and enough vegetable oil-based soap to make a paste. Test mix on a small portion of the scuff mark by washing and rinsing well. If the floor finish is removed, you may be able to restore it using 1/2 cup cornstarch and enough water to make a paste. Rub this mixture into the spot and let it dry. Buff to a polish.

